

Specifications SWC# 214 - Herbicides

General requirements

All herbicides bid must have a formulated EPA registered control number. **This EPA control number must be listed on the bid response sheet.**

An Environmental Protection Agency (EPA) registered label shall be prominently displayed on each provided container. The current Material Safety Data Sheets (MSDS) must be provided in each shipment. All products bid must be registered with the State of Tennessee Department of Agriculture at the time of the bid opening.

All containers must have "gallon/liter" or "ounce/pound" increment markings on the side of the container.

Technical Assistance, Service and Training

The manufacturer or distributor representative must provide technical support to Tennessee Department of Transportation (TDOT) and other agencies for any health, legal, technical, chemical residue sampling or public relations needs.

The vendor shall provide a toll free number for technical service during normal business hours of 8:00 a.m. to 5:00 p.m. Central Standard Time (CST). The vendor shall respond telephonically to a request for technical assistance within two hours. The vendor shall provide on-site support within twenty-four hours of initial request from the State. The manufacturer's representative must hold a professional degree in horticulture, arboriculture, crop science, or forestry. Evidence of this degree must be submitted with bid.

The manufacturer and distributor representative must teach classes that meet the needs of EPA worker protection standards, general herbicide safety, and mode of action, handling, and application. Awarded vendor must have these classes evaluated and approved and the classes must enable the individuals completing the classes to earn pesticide license renewal points from the Department of Agriculture, Kathy Booker at (615)837-5133 or kathy.booker@tn.gov.

Manufacturer and distributor representative training shall be required each spring and fall. Each session will be a one day, approximately 7.5 hour training class shall be held at two of the four TDOT regional facilities for approximately one hundred (100) individuals per location and is available to all state agencies. Awarded vendor(s) shall provide training contact information. Training shall be provided at no additional charge to the state. Training for TDOT shall be coordinated through Bruce Scott at bruce.scott@tn.gov or 615-741-5167.

Specifications and Formulations

ITEM: 1000105620 2.5 gallon per CH

ACTIVE INGREDIENTS: GLYPHOSATE: N-(PHOSPHONOMETHYL) GLYCINE,
ISOPROPYLAMINE SALT.....41%
INERT INGREDIENTS:59%
TOTAL.....100%

ACCEPTABLE BRANDS: RAZOR PRO, GLYPHOSATE 4 PLUS, OR EQUAL

ITEM: 1000105621 2.5 gallon per CH

ACTIVE INGREDIENTS: ISOPROPYLAMINE SALT OF IMAZAPYR (2-/4,5
DIHYDRO-4-METHYL-4-(1-METHYLETHYL)-5-OXO-1 H-IMIDAZOL-2YL/-3-
PYRIDINECARBOXYLIC ACID).....26.7%
INERT INGREDIENTS.....73.3%
TOTAL.....100.0%

ACCEPTABLE BRANDS: ARSENAL , POLARIS OR EQUAL (MUST BE AQUATIC APPROVED)

ITEM: 1000105623 2.5 gallon per CH

ACTIVE INGREDIENTS: GLYPHOSATE, N-(PHOSPHONOMETHYL) GLYCINE, IN
THE FORM OF ITS ISPROPYLAMINE SALT.....53.8%
INERT INGREDIENTS.....46.2%
TOTAL.....100.0%

ACCEPTABLE BRANDS: GLYPRO, AQUA NEAT, AQUA STAR, GLYPRO, ROUND UP CUSTOM, RODEO
OR EQUAL

ITEM: 1000105625 2.5 Gal. per CH

ACTIVE INGREDIENTS: FOSAMINE AMMONIUM (AMMONIUM SALT OF FOASMINE
/ ETHYL HYDROGEN (AMINOCARBONYL) PHOSPHONATE/).....41.5%
INERT INGREDIENTS.....58.5%
TOTAL.....100.0%

ACCEPTABLE BRANDS: KRENITE S OR EQUAL

ITEMS: 1000105636 2.5 Gal. per CH

ACTIVE INGREDIENTS: TRIISOPROPANOLAMMONIUM SALT OF 2-PYRIDINE
CARBOXYLIC ACID, 4-AMINO -3, 6-DICHLORO-.....40.6%
INERT INGREDIENTS.....59.4%
TOTAL.....100.0%

ACCEPTABLE BRANDS: MILESTONE OR EQUAL

ITEM: 1000105635 20 Oz. per CH

ACTIVE INGREDIENTS: SULFOSULFURON.....	75.0%
INERT INGREDIENTS.....	25.0%
TOTAL.....	100.0%

ACCEPTABLE BRANDS: OUTFIDER OR EQUAL

ITEM: 1000105631 (NON-IONIC SURFACTANT) 2.5 Gal. per CH
 PRIMARY COMPONENTS: ALKYLARYLPOLYOXYETHEYLENE AND OTHER
 INGREDIENTS.....90.0%
 INERT INGREDIENTS.....10.0%
 TOTAL.....100.0%

ACCEPTABLE BRANDS: ACTIVATE PLUS 90, CANNON, INVADE 90, ALLIGARE 90
 OR EQUAL

ITEM: 1000172537 2/2.5 Gal. per CA
 ACTIVE INGREDIENTS:
 INDAZIFLAM0.089%
 DIQUAT DIBROMIDE.....0.890%
 GLYPHOSATE ISOPROPYLAMINE SALT.....20.460%
 OTHER INGREDIENTS.....78.561%
 TOTAL.....100.00%

ACCEPTABLE BRANDS: ESPLANADE EZ OR EQUAL

ITEM: 100072538 4/1 Gal. per CA
 DRIFT CONTROL AGENT: DESIGNED FOR USE WITH ROADSIDE HERBICIDE APPLICATION TO REDUCE SPRAY
 DRIFT POTENTIAL TO NON-TARGET AREAS.

ACCEPTABLE BRANDS: STRIKE ZONE DF, WINDBREAK OR EQUAL

ITEM: 1000071524 12/32Oz. per CA
 DEFOAMER AGENT: DESIGNED FOR USE WITH ROADSIDE HERBISIDE APPLICATION TO REDUCE OR SUPRESS
 THE FORMATION OF FOAM IN SPRAY TANKS.

ACCEPTABLE BRANDS: FOAM BUSTER, DEFOAMER OR EQUAL

*****Note: Bidder is to provide product literature, technical data sheet and SDS for each
 product bid; either attached to the bid or emailed to the Category Specialist.**

Blended Herbicides

All items will include Product, Blending Fee and Freight Charges. All Items will be priced on a per gallon quantity.

Blending supplier shall ensure that all products blend correctly.

Item No. # 1000181638 Herbicide Blend; Bare Ground, Guard Rail, Cable Rail and Concrete Barrier: (Suspended Blend)

15 Gallon Returnable container

<u>PRODUCT</u>	<u>RATE/ACRE.</u>
Method 240 SL	15 OZ.
Esplanade	7 OZ.
Arsenal	20 OZ.
Roundup Pro	32 OZ.

Blend to be mixed at 1 gallon to 24 gallons of water for a 25 gallon per acre treatment

*Field to add 16 ounces surfactant

Item No. # 1000181640 Herbicide Blend; Selective Weed Control:

15 Gallon Returnable container

<u>PRODUCT</u>	<u>RATE/ACRE.</u>
Method 240 SL	6 OZ.
Escort XP	.5 OZ.
Milestone	4 OZ.
Plateau	3 OZ.
Surfactant	1 QT.

Blend to be mixed at 1 gallon to 24 gallons of water for a 25 gallon per acre treatment

Item No. #1000181641 Herbicide Blend; Brush Control:

15 Gallon Returnable container

<u>PRODUCT</u>	<u>RATE/ACRE.</u>
Method 240 SL	13 OZ.
Escort XP	2 OZ.
Milestone	7 OZ.
Surfactant	1 QT.

Blend to be mixed at 1 gallon to 24 gallons of water for a 25 gallon per acre treatment

Item No. # 1000181643 Herbicide Blend; Dormant Stem Brush:

15 Gallon Returnable container

<u>PRODUCT</u>	<u>RATE/ACRE</u>
Method 240 SL	16 OZ.
Garlon 4 Ultra	4 QT.
Basal Oil	2 GAL.

Blend to be mixed at 3 gallon to 22 gallons of water for a 25 gallon per acre treatment

Item No. # 1000181645 Herbicide Blend; Selective Weed/Johnson grass: (Suspended Blend)

15 Gallon Returnable container

<u>PRODUCT</u>	<u>RATE/ACRE.</u>
Derigo	3 OZ.
Method	6 OZ.

*Field to add 16 ounces surfactant

Blend to be mixed at 1 gallon to 24 gallons of water for a 25 gallon per acre treatment

Item No. #1000XXXXXX, Herbicide Blend: Basal/Stump Cut

5 Gallon Non-returnable container (Minimum order is 80 gallons)

<u>PRODUCT</u>	<u>RATE/100</u>
Method 240 SL	5%
Arsenal	2%
Basal Oil	75%
Emulsifier	18%

Blend is ready for use straight from the container.

Specifications for 15 Gallon Refillable/Returnable Container:

- ONLY ACCEPTABLE CONTAINERS SHALL BE CENTER SUMP LOADED, HAVE A SINGLE CENTER BUNG, AND HAVE A CONVEX BOTTOM.
- CONTAINERS MUST HAVE BOTH GALLON AND LITER INCREMENTS ON THE SIDE OF THE DRUM.
- CONTAINERS SHALL HAVE A NEUTRAL COLOR TO FACILITATE DETERMINING THE AMOUNT OF PRODUCT IN CONTAINER.
- CONTAINERS SHALL BE DOT APPROVED FOR USE AS A "RETURNABLE". NO ONE-WAY CONTAINERS SHALL BE ACCEPTED.
- CONTAINERS SHALL HAVE HANDLING RINGS ON THE TOP AND BOTTOM OF THE CONTAINER AND SHALL BE CAPABLE OF HOLDING UP TO 15 GALLONS OF PRODUCT.
- CONTAINERS SHALL HAVE A STAINLESS STEEL MICROMATIC VALVE.

Minimum orders and shipping requirements:

- AGENCY SHALL ORDER 15 GALLON RETURNABLE CONTAINERS IN INCREMENTS OF 9 CONTAINERS PER PRODUCT. PRODUCT TO BE SHIPPED ON PALLETS (9 FIFTEEN GALLON CONTAINERS PER PALLET).
- THE VENDOR IS REQUIRED TO PAY ALL SHIPPING AND ASSOCIATED COST FOR PICK-UP OF THE RETURNABLES.
- AGENCY WILL BE RESPONSIBLE FOR RETAINING ALL EMPTY 15 GALLON RETURNABLE CONTAINERS AND CONTACTING THE SUCCESSFUL CONTRACTED VENDOR TO SCHEDULE RETURN OF CONTAINERS. PICK UP WILL BE INCREMENTS OF 9 CONTAINERS ON THE PALLET THEY WERE SHIPPED ON.

ADDITIONAL LABELING REQUIREMENTS ON BLENDED PRODUCTS

EACH CONTAINER OF BLENDED PRODUCT SHALL BE ADDITIONALLY LABELED PER THE FOLLOWING.

ITEM 1000181638: BAREGROUND

ITEM 1000181640: SELECTIVE WEED CONTROL

ITEM 1000181641: BRUSH CONTROL

ITEM 1000181643: DORMANT STEM BRUSH

ITEM 1000181645: JOHNSON GRASS

ITEM 1000XXXXX: BASAL/STUMP CUT